District 08 Mobility Performance Report

2018 Second Quarter

DEPARTMENT OF TRANSPORTATION
DISTRICT 8
DIVISION OF OPERATIONS
TMS SUPPORT
August 23, 2018

District 08 Mobility Performance Report

2018 Second Quarter

EXECUTIVE SUMMARY

Overview

Caltrans District 8 covers approximately 28,650 square miles of land, making it the largest district in California. District 8 consists of two counties; San Bernardino and Riverside. Both counties are in Southern California and part of the Inland Empire. Riverside County has an estimated population of 2.4 million residents while San Bernardino County is estimated at 2.2 million residents. With a total of 4.6 million residents, District 8 comprises of twelve percent of California's total population.

The quarterly Mobility Performance Report compares the data from the current quarter with over a year ago as well as the previous quarter, for the following performance measures:

- Vehicle Miles of Travel (VMT)
- Vehicle Hours of Delay (VHD)
- Lost Lane Miles (LLM)
- Delay by County and Route
- Detector Health
- Bottleneck Locations

Vehicle Detector Stations, installed on urban-area freeways are continuously collect data and are strategically placed at locations where congestion is regularly experienced. The MPR uses the data collected from Caltrans Performance Measurement System (PeMS) to produce this report and conduct traffic studies. This report presents congestion information at two speed thresholds: delay from vehicles traveling below 35 miles per hour (mph), and delay from vehicles traveling below 60 mph. The 35-mph threshold represents severe congestion, while delay at 60 mph represents all congestion. These thresholds are set by Caltrans and are based upon engineering experience and District input.

FINDINGS

In the second quarter, at the 35 mph speed threshold, Riverside County exhibited 1.66 million vehicle hours of delay followed by San Bernardino County at 1.15 million. Total delay in District 8 equaled 2.81 million VHD for 35 mph speed threshold. This was a 17.6 percent increase from the previous quarter, and a 53.2 percent increase when compared to the same quarter over a year ago. The 60 mph speed threshold saw a similar trend, during the first quarter of 2018, total delay equaled 7.8 million VHD, which was an increase in delay by 11.3 percent from last quarter and a 30.5 percent increase in delay for the same quarter over a year ago.

Vehicle Miles Traveled (VMT) in District 8 during the second quarter was 7.3 billion miles, which was a 1.3 percent increase when compared to VMT from a year ago and a 1.4 percent decrease from the previous quarter.

The busiest day of the week as far as congestion for the second quarter was Friday with 130,000 hours of delay for speed under 60 mph followed by Thursday with 105,000 hours and Monday with 104,000 hours.

Top Ten AM Bottlenecks @60mph for the 2018 Second Quarter:

Rank	County	Freeway	Approximate Location	Period	Begin CA Postmile	Average Extent (miles)	Total Delay (hours)	Average Duration (hours)
1	Riverside	SR91-W	Green River	AM	R.995	4.4	236390	3.7
2	Riverside	SR71-S	S/O Prado Dam Road	AM	2.5	3.3	56525.1	3.4
3	Riverside	SR91-W	Lincoln	AM	5.28	1.1	36594.8	2.9
4	Riverside	SR60-W	W/O Main Street	AM	11.6	3.2	29851	2.2
5	Riverside	I15-N	.25 N/O 6th ST.	AM	45.93	2.8	28471.7	1.9
6	Riverside	I15-N	Bedford Wash	AM	36.3	3.3	28144	3.2
7	Riverside	SR91-W	Pierce	AM	10.724	1.5	25351.2	3.0
8	Riverside	I215-S	Central -Watkins	AM	39.643	1.0	22507.6	3.1
9	San Bernardino	I10-W	Milliken Ave	AM	8.987	1.9	22330	1.7
10	Riverside	I215-S	Center St	AM	44.908	2.1	21310	2.1

Top Ten PM Bottlenecks @60mph for the 2018 Second Quarter

Rank	County	Freeway	Approximate Location	Period	Begin CA Postmile	Average Extent (miles)	Total Delay (hours)	Average Duration (hours)
1	Riverside	I15-S	Cajalco Road	PM	37.1	3.5	74085.6	2.9
2	Riverside	I215-S	Vanburen Blvd	PM	R33.463	3.2	67425	2.2
3	San Bernardino	I10-E	Fontana Rest	PM	13.8	2.8	63414.4	2.9
4	San Bernardino	I15-N	4th St NB ONR	PM	3.2	1.1	48647.1	3.6
5	San Bernardino	I15-N	Oakie Flats	PM	R17.401	3.3	43829.5	2.4
6	Riverside	SR60-E	Pigeon Pass	PM	14.509	2.3	42582.6	3.4
7	San Bernardino	I15-S	Jurupa	PM	.969	1.6	41216.7	2.8
8	San Bernardino	I10-E	Haven Ave	PM	8.22	2.1	31790.4	1.6
9	Riverside	I215-S	Central -Watkins	PM	39.643	3.1	30521.5	1.7
10	Riverside	SR91-E	Main	PM	6.492	1.0	28363.6	3.4

PROJECT STATUS

The following District 8 projects which are separated by county are currently in construction for the year of 2018. These projects will relieve congestion in District 8, however during the construction phase there might be an increase in delay during off-peak periods due to lane closures.

Riverside County:

RIV - Rte. 10: Location - City of Indio at Jefferson St, EA: 475204
Postmile 51.70 to 53.10 - Demolish existing bridge and northbound Indio Boulevard overcrossing, and replace with new six-lane bridge.

RIV - Rte 15: Location - From San Diego county line to 15/91 separation, EA: 0G7704
Postmile R0.00 to 41.80 - Install New Fiber Optic infrastructure on Rte 15 from PM 0.00/41.80 and upgrade newly installed wireless vehicle detection stations. Connect all the existing TMS elements to the newly installed Fiber Optic infrastructure

RIV - Rte 15,79: Location - Temecula @ I-15/SR-79 South Interchange, EA: 432304
Rte 15 Postmile 3.00 to 4.00, Rte 79 Postmile 19.60 to 19.90 – Realign and reconstruct onramp and offramp.

RIV - Rte 15: Location - Interstate 15/Cajalco Road Interchange, EA: 0J6104
Postmile 36.40 to 37.60 - Interchange Improvements & Reconstruction

RIV – Rte 15: Location – SR74 to SR-60 and I-215 to SR-74, EA: 0J080
I-15 Corridor Improvement Project to add two Toll Express lane each direction from Cajalco Road to State Route 60, widen bridges and add sound wall.

RIV – Rte 60: Location – Highway 60 at Potrera Blvd, City of Beaumont, EA: 34141
Postmile 28.70 to 30.20, New Bridge and Highway widening

RIV – Rte 15: Location – I-15/SR-79, EA: 43230
Postmile 3.0 to 4.0, Interchange Improvement @ SR-79(Front St) and I-15.

RIV – Rte 60: Location – Rte 60 from Milliken Ave to 91/215
Postmile 0.0 to R12.2, Replace wireless communication system with Fiber Optic Infrastructure.

RIV – Rte 15: Location Limonite Ave/I-15, EA: 0E150
Postmile Various, Interchange Improvement

San Bernardino County:

SBD - Rte 10: Location – San Bernardino County from Redlands to Orange St, EA: 0K2914
Postmile 30.90 to 33.30, Lane Replacement in San Bernardino County in Redlands from Orange Street Undercrossing to Redlands Blvd off-ramp undercrossing.

SBD - Rte 15: Location – Kenwood Ave to West Hesperia, EA: 0Q7404
Postmile 15.40 to 30.80, Lane Replacement on I-15 from 0.4 mile north of Kenwood Avenue to 0.3 mile south of West Hesperia OH

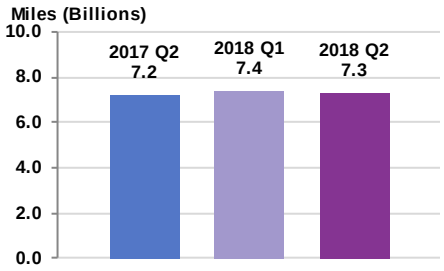
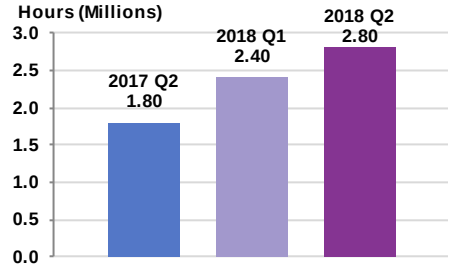
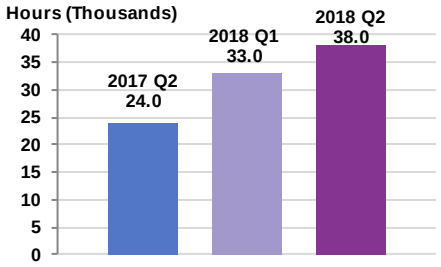
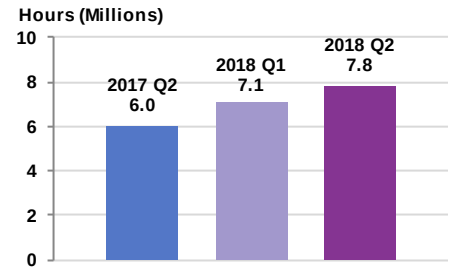
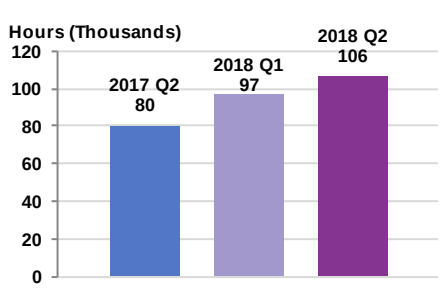
SBD - Rte 15: Location – Victorville from Mojave Dr to Stoddard Wells Rd, EA: 3555VA
Postmile 42.50 to 46.00, In San Bernardino County in Victorville from 0.5 Mile North of Mojave Drive to 1.5 Mile North of Stoddard Wells Road Overcrossing, Widen I-15, Reconstruct 3 IC'S, Construct 2 new BR and widen 3 BR

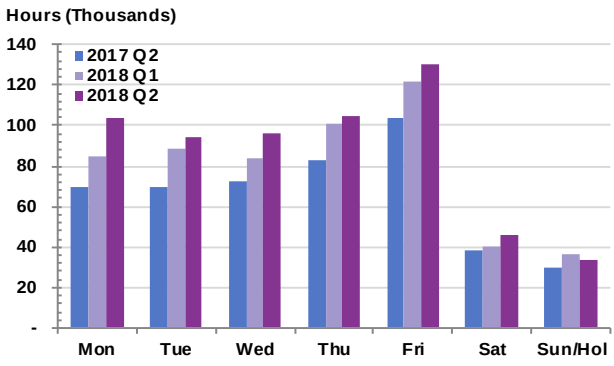
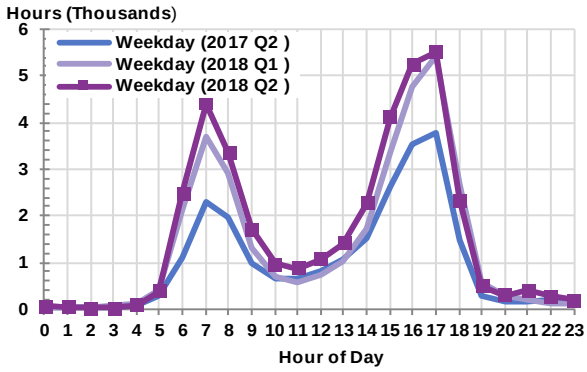
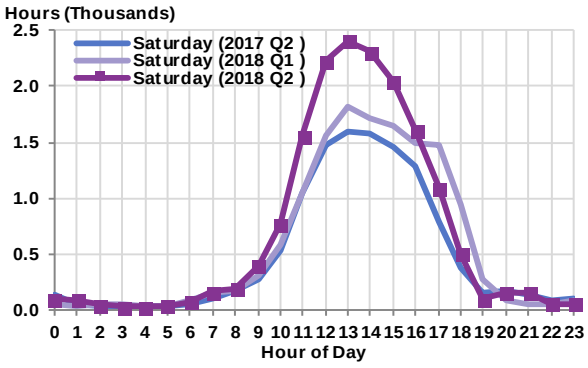
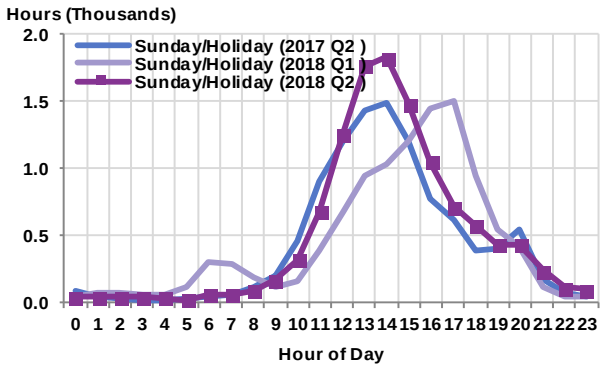
SBD – Rte Various Locations, San Bernardino and Riverside County, EA: 1C6304
Install Road Weather Information System and Modify Existing Electrical system

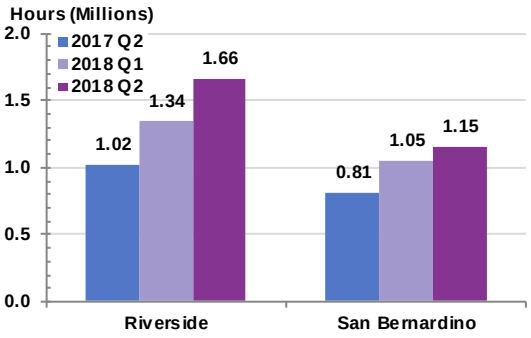
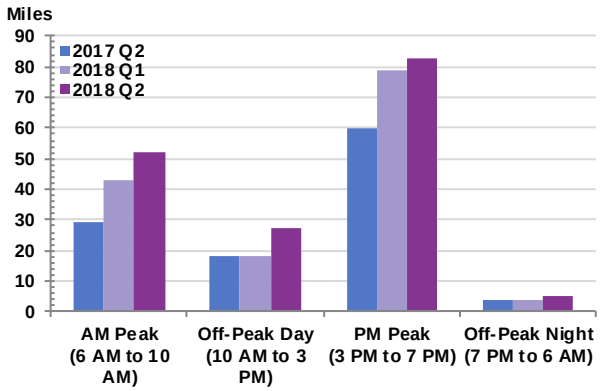
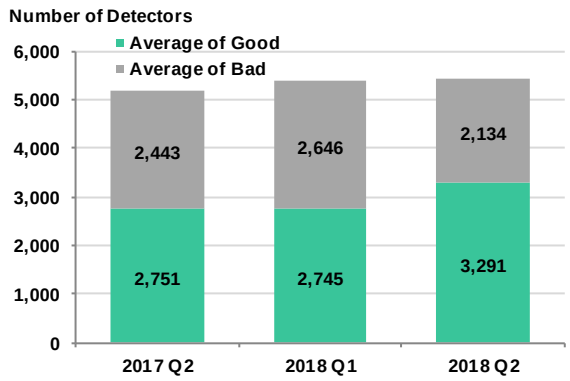
SBD – Rte 215: Locations – Rte 215/Barton Rd, EA: 0J070
Postmile 0.58/1.95, Project to reconstruct the existing I-215/Barton Rd Interchange.

SBD – Rte 210: Location – From Rte 10 to Rte 215, EA: 0E5514
Postmile 21.8 to 29.8, Install RMS, CCTV, VDS, CMS and Fiber Optic Backbone.

2018 Second Quarter Mobility Statistics District 8

Measure	Graph	Percentage Change	
		Over one year ago	Over last quarter
Vehicle Miles of Travel (VMT)		1.3%	-1.4%
Total Vehicle Hours of Delay (VHD) at 35 mph		53.2%	17.6%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		58.6%	15.3%
Total Vehicle Hours of Delay (VHD) at 60 mph		30.5%	11.3%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		32.6%	9.4%

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago –	Largest Magnitude Decrease over last quarter Sun/Hol -5.8%
		Largest Magnitude Increase over one year ago Monday 48.3%	Largest Magnitude Increase over last quarter Monday 22.9%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 3 AM -5.5%	Largest Magnitude Weekday Decrease over last quarter 6 PM -12.2%
		Largest Magnitude Weekday Increase over one year ago 7 AM 92.5%	Largest Magnitude Weekday Increase over last quarter 3 PM 22.8%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 7 PM -37.2%	Largest Magnitude Saturday Decrease over last quarter 6 PM -46.8%
		Largest Magnitude Saturday Increase over one year ago 1 PM 51.5%	Largest Magnitude Saturday Increase over last quarter 12 PM 42.5%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago 11 AM -25.1%	Largest Magnitude Sun./Holiday Decrease over last quarter 5 PM -53.2%
		Largest Magnitude Sun./Holiday Increase over one year ago 2 PM 22.7%	Largest Magnitude Sun./Holiday Increase over last quarter 1 PM 85.9%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago –	Largest Magnitude Decrease over last quarter –
		Largest Magnitude Increase over one year ago Riverside 62.5% ↑	Largest Magnitude Increase over last quarter Riverside 24.5% ↑
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago –	Largest Magnitude Decrease over last quarter –
		Largest Magnitude Increase over one year ago AM Peak 80.1% ↑	Largest Magnitude Increase over last quarter AM Peak 21.7% ↑
Average Number of Good and Bad Detectors		Change in Good over one year ago 19.6% ↑	Change in Good over last quarter 19.9% ↑
		Change in Bad over one year ago -12.7% ↓	Change in Bad over last quarter -19.3% ↓

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2018 Q2-2017 Q2		Difference 2018 Q2-2018 Q1		Rank		
Route	County	2017 Q2	2018 Q1	2018 Q2	Absolute	Percentage	Absolute	Percentage	2017 Q2	2018 Q1	2018 Q2
SR91	Riverside	297,125	466,192	568,090	270,965	91.2%	101,898	21.9%	1	1	1
I15	Riverside	229,613	369,871	446,844	217,231	94.6%	76,974	20.8%	4	2	2
I215	Riverside	289,352	346,998	438,376	149,024	51.5%	91,378	26.3%	2	4	3
I10	San Bernardino	230,861	348,248	390,869	160,008	69.3%	42,621	12.2%	3	3	4
I15	San Bernardino	224,671	294,912	335,255	110,584	49.2%	40,343	13.7%	5	5	5
I210	San Bernardino	134,112	158,863	175,102	40,990	30.6%	16,239	10.2%	6	6	6
SR60	Riverside	130,178	106,959	125,795	-4,384	-3.4%	18,835	17.6%	7	8	7
SR60	San Bernardino	112,170	90,654	122,381	10,211	9.1%	31,727	35.0%	8	9	8
I215	San Bernardino	67,700	107,511	66,953	-747	-1.1%	-40,558	-37.7%	9	7	9
SR71	San Bernardino	41,444	53,871	57,301	15,857	38.3%	3,430	6.4%	11	10	10
I10	Riverside	42,367	15,311	44,105	1,738	4.1%	28,794	188.1%	10	12	11
SR71	Riverside	34,684	29,736	39,423	4,740	13.7%	9,687	32.6%	12	11	12
SR259	San Bernardino	0	1	1	1		-1	-35.7%		13	13
TOTALS		**1,834,276**	**2,389,128**	**2,810,496**	**976,220**	**53.2%**	**421,368**	**17.6%**			